The U.S. Department of Agriculture's (USDA) *Food Buying Guide for Child Nutrition Programs* (FBG) provides yield information for common types and customary sizes of meat/meat alternates, vegetables, fruits, and grains, including commercially available foods and USDA Foods. Sponsors of Child Nutrition Programs should use the FBG to determine how much food to purchase to meet the minimum portion sizes in the USDA's meal patterns, and to calculate how recipes contribute to the meal patterns.

If a food service operation consistently obtains a higher or lower yield for a product than the yield specified by the FBG, the sponsor should conduct an in-house yield study to determine the actual number of portions of a specified size that the product provides. Sponsors must follow specific and verifiable procedures to document product yields. This document summarizes the Connecticut State Department of Education's (CSDE) procedures for conducting product yield studies for Child Nutrition Programs. The CSDE's Yield Study Form for Child Nutrition Programs is available at the end of this document.

#### **Yield Study Procedures**

- 1. Select a day when the product is served on the menu. Use at least four separate samples of the product to determine yields. A "sample" is the product pack unit, such as number 10 cans or 5-pound bags. If the food service operation uses more samples, the yield data will be more accurate.
- 2. For the best yield estimate, at least two people should independently portion and count the samples. Each person completes half of the samples. For example, with a sample of four cans, each person works alone to measure and count the servings from two cans.
- 3. Select the appropriate measuring utensil for the portion size being served, such as a number 16 scoop/disher or ½-cup measuring spoon. For information on measuring utensils, refer to the Institute of Child Nutrition's (ICN) *Basics at a Glance Portion Control Poster* and visit the "Weights and Measures" section of the CSDE's Crediting Foods in School Nutrition Programs webpage.
- 4. Fill the measuring utensil level to the top of the measure.
- 5. Carefully count and document the number of portions in each sample.
- 6. Add the total number of servings from each of the samples.
- 7. Divide the total number of servings by the number of samples to get the average number of servings per sample.
- 8. Complete the CSDE's *Yield Study Form for Child Nutrition Programs* and maintain on file for review by CSDE staff during the Administrative Review of the sponsor's Child Nutrition Programs.

The example below shows a completed yield study form. For additional assistance, contact the CSDE's Child Nutrition Programs staff.

#### Sample Completed Yield Study Form

**Instructions:** Complete this form to document yields for products that provide a higher or lower yield than the yield specified by the U.S. Department of Agriculture's (USDA) *Food Buying Guide for Child Nutrition Programs* (FBG), and for products that are not included in the FBG. For assistance, refer to the attached "Information and Instructions" and completed sample *Yield Study Data Form*. The sponsor must maintain this form on file. The Connecticut State Department of Education (CSDE) will review this information during the Administrative Review of the sponsor's Child Nutrition Programs.

Name of site:	ABC Middle School		Date of study:	September 6, 2016
Name of produc	t: Diced pears in 1	.00% Juice	Manufacturer:	XYZ Company
Unit pack size:	#10 can	Number of units	used for yield study	y: 4
		Serving size	used for yield study	y: ½ cup

Yield Study Data					
Product sample *	Measured/counted by (name of employee)	Number of servings per unit			
1	Mary Smith	17			
2	Mary Smith	18			
3	John Michaels	18			
4	John Michaels	17			
5					
6					
7					
8					

<sup>\*</sup> Use at least four separate product samples. More samples provide more accurate yield data.

A	Total number of servings:	70
В	Total number of units sampled:	4
C	Average number of servings per unit (Divide A by B):	17.5
D	Round down the number in C to the nearest whole serving:	17

I certify that the information above is correct.

 Pat Brown
 Pat Brown
 September 6, 2016

 Food service director's name
 Food service director's signature
 Date



This form is available at https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Yield\_Study\_Form.pdf.

#### Resources

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Basics at a Glance Portion Control Poster (ICN):
   https://theicn.org/icn-resources-a-z/basics-at-a-glance/
Food Buying Guide for Child Nutrition Programs (USDA):
   https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs
Menu Planning for Child Nutrition Programs (CSDE webpage):
   https://portal.ct.gov/SDE/Nutrition/Menu-Planning
No Time to Train: Short Lessons for School Nutrition Assistants: Identifying the Parts of a
   USDA Quantity Recipe (ICN):
   https://theicn.org/resources/354/no-time-to-trainshort-lessons-for-school-nutrition-
   assistants/105430/lesson-32-identifying-the-parts-of-a-usda-quantity-recipe.pdf
No Time to Train: Short Lessons for School Nutrition Assistants: Portioning Matters (ICN):
   https://theicn.org/resources/354/no-time-to-trainshort-lessons-for-school-nutrition-
   assistants/105427/lesson-29-portioning-matters.pdf
On the Road to Professional Food Preparation eLearning: Portion Control (ICN):
   https://theicn.docebosaas.com/learn/course/external/view/elearning/16/portion-control
On the Road to Professional Food Preparation eLearning: Recipe Adjustments (ICN):
   https://theicn.docebosaas.com/learn/course/external/view/elearning/17/recipe-
   adjustments
On the Road to Professional Food Preparation eLearning: Weights and Measures (ICN):
   https://theicn.docebosaas.com/learn/course/external/view/elearning/19/weights-and-
   measures
Standardized Recipe Form for School Nutrition Programs:
   https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/
   Standardized_Recipe_Form_Schools.docx
Standardized Recipe Form for the CACFP (CSDE):
   https://portal.ct.gov/-/media/SDE/Nutrition/CACFP/Crediting/
   Standardized_Recipe_Form_CACFP.docx
Standardized Recipe Form for the SFSP (CSDE):
   https://portal.ct.gov/-/media/SDE/Nutrition/SFSP/MealPattern/
   Standardized_Recipe_Form_SFSP.docx
Team Nutrition Recipes and Cookbook Toolkit (USDA):
   https://www.fns.usda.gov/tn/team-nutrition-recipes-and-cookbook-toolkit
Weights and Measures (CSDE's Crediting Foods in School Nutrition Programs webpage):
   https://portal.ct.gov/SDE/Nutrition/Crediting-Foods-in-School-Nutrition-
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Programs#WeightsMeasures



For more information, visit the CSDE's Child Nutrition Programs webpage or contact the Child Nutrition Programs staff in the CSDE's Bureau of Health/Nutrition, Family Services and Adult Education, 450 Columbus Boulevard, Suite 504, Hartford, CT 06103-1841.

This document is available at https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Yield\_Study\_Form.pdf.

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- mail: U.S. Department of Agriculture Office of the Assistant Secretary for Civil Rights 1400 Independence Avenue, SW Washington, D.C. 20250-9410;
- (2) fax: (202) 690-7442; or
- (3) email: program.intake@usda.gov.

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**Instructions:** Complete this form to document yields for products that provide a higher or lower yield than the yield specified by the U.S. Department of Agriculture's (USDA) *Food Buying Guide for Child Nutrition Programs* (FBG), and for products that are not included in the FBG. For assistance, refer to the attached "Information and Instructions" and sample completed yield study data form. The sponsor must maintain this form on file. The Connecticut State Department of Education (CSDE) will review this information during the Administrative Review of the sponsor's Child Nutrition Programs.

Date of study:

Name of product:	Manufacturer:					
Unit pack size:	Number of units used for yield study:					
	Serving size used for yield study:					
Yield Study Data						
Product sample *	Measured/counted by (name of employee)	Number of servings per unit				
1						
2						
3						
4						
5						
6						
7						
8						
* Use at least four	separate product samples. More samples provide	more accurate yield data.				
A	Total number of servings:					
В	Total number of units sampled:					
C Averag	ge number of servings per unit (Divide A by B):					
<b>D</b> Round down the number in C to the nearest whole serving:						
I certify that the information above is correct.						
Food service director's name Food service director's signature Date						



Name of site

This form is available at https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/Yield\_Study\_Form.pdf.